- a naturally occurring allelic variation of SEQ ID NO: 1 or SEQ ID NO: 2,
- SEQ ID NO: 1 or SEQ ID NO: 2 having one inserted, deleted, or conservatively substituted amino acid,
- N-terminally truncated or C-terminally truncated SEQ ID NO: 1 or SEQ ID NO: 2, or
- acetylated, glycosylated, amidated, and/or phosphorylated SEQ ID NO: 1 or SEQ ID NO: 2.
- 29. N-terminally truncated or C-terminally truncated eukaryotic neutral sphingomyelinase having eukaryotic neutral sphingomyelinase enzymatic activity.
- 30. A medicament containing the eukaryotic neutral sphingomyelinase according to claim 28, together with further auxiliary agents
- 31. A diagnostic agent containing the eukaryotic neutral sphingomyelinase according to claim 28, together with further auxiliary agents.
- 32. The eukaryotic neutral sphingomyelinase of claim 28, wherein the sequence is SEQ ID NO: 1 or SEQ ID NO: 2.

- 33. The eukaryotic neutral sphingomyelinase of claim 28, wherein the sequence is a variant of SEQ ID NO: 1 or SEQ ID NO: 2 having eukaryotic neutral sphingomyelinase enzymatic activity, wherein the variant is a naturally occurring allelic variation of SEQ ID NO: 1 or SEQ ID NO: 2.
- 34. The eukaryotic neutral sphingomyelinase of claim 28, wherein the sequence is a variant of SEQ ID NO: 1 or SEQ ID NO: 2 having eukaryotic neutral sphingomyelinase enzymatic activity, wherein the variant is SEQ ID NO: 1 or SEQ ID NO: 2 having one inserted, deleted, or conservatively substituted amino acid.
- 35. The eukaryotic neutral sphingomyelinase of claim 28, wherein the sequence is a variant of SEQ ID NO: 1 or SEQ ID NO: 2 having eukaryotic neutral sphingomyelinase enzymatic activity, wherein the variant is N-terminally truncated or C-terminally truncated SEQ ID NO: 1 or SEQ ID NO: 2.
- 36. The eukaryotic neutral sphingomyelinase of claim 28, wherein the sequence is a variant of SEQ ID NO: 1 or SEQ ID NO: 2 having eukaryotic neutral sphingomyelinase enzymatic activity, wherein the variant is acetylated, glycosylated, amidated, and/or phosphorylated SEQ ID NO: 1 or SEQ ID NO: 2.